IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently amended) A method, comprising:

~~selecting~~ displaying a graphical user interface that allows a user to select a connection source and a connection destination from a ~~graphical user interface that displays~~ a topology of a network that is presented on the graphical user interface;

executing a routing algorithm to determine a path through the network amongst a plurality of possible paths through the network, the path having said connection source and said connection destination as its endpoints; and,

provisioning ~~the~~ a connection within the network that corresponds to the path.

2. (Currently amended) The method of claim 1 wherein said executing a routing algorithm further comprises~~ing~~ executing ~~the~~ a distributed routing algorithm ~~at a node~~ within nodes of the network.

3. (Currently amended) The method of claim 2 wherein said executing a distributed routing algorithm further comprises~~ing~~ sending topology information from a first node to a second node within the network.

4. (Currently amended) The method of claim 2 wherein said executing a distributed routing algorithm further comprisesing sending bandwidth resource information from a first node to a second node within the network.

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5. (Currently amended) The method of claim 2 wherein said executing a distributed routing algorithm further comprisesing sending Quality of Service (QoS) information from a first node to a second node within the network.

6. (Currently amended) The method of claim 1 wherein said executing a routing algorithm further comprisesing executing the routing algorithm at a network control management system that is coupled to the network.

7. (Original) The method of claim 1 wherein the graphical user interface allows the user to select a bandwidth for the connection.

8. (Currently amended) The method of claim 7 wherein the graphical user interface allows the user to select at least one Quality of Service (QoS) parameters for the connection.

9. (Currently amended) The method of claim 8 wherein the at least one QOS parameter further comprises end-to-end transit delay for the connection.

10. (Currently amended) The method of claim 8 wherein the at least one QoS parameter further comprises jitter.

11. (Currently amended) A machine readable medium having instructions stored thereon ~~which~~ that when executed by one or more processors cause the one or more processors to perform a method, the method comprising,:

~~select~~ displaying a graphical user interface that allows a user to select a connection source and a connection destination from a ~~graphical user interface that displays~~ a topology of a network that is displayed on the graphical user interface; and,

causing ~~execute~~ a routing algorithm to be executed and a connection to be provisioned, the routing algorithm being executed to determine a path through the network amongst a plurality of possible paths through the network, the path having the connection source and the connection destination as its endpoints,; ~~and provision~~ the connection being provisioned within the network, the connection ~~that~~ correspondings to the path.

12. (Currently amended) The machine readable medium of claim 11 ~~further comprising instructions which when executed cause the processor to execute~~ wherein the routing algorithm ~~at a node within the network~~ is a distributed routing algorithm.

13. (Currently amended) The machine readable medium of claim 12 ~~further comprising instructions which when executed cause the processor to~~ wherein the distributed routing algorithm is designed to send topology information from a first node to a second node within the network.

14. (Currently amended) The machine readable medium of claim 12 ~~further comprising instructions which when executed cause the processor~~ wherein the distributed routing algorithm is designed to send bandwidth resource information from a first node to a second node within the network.

15. (Currently amended) The machine readable medium of claim 12 ~~further comprising instructions which when executed cause the processor~~ wherein the distributed routing algorithm is designed to send Quality of Service (Qos) information from a first node to a second node within the network.

16. (Currently amended) The machine readable medium of claim 11 further comprising instructions which when executed cause the one or more processors to execute the routing algorithm at a network control management system coupled to the network.

17. (Original) The machine readable medium of claim 11 wherein the graphical user interface allows the user to select a bandwidth for the connection.

18. (Currently amended) The machine readable medium of claim 17 wherein the graphical user interface allows the user to select at least one Quality of Service (QoS) parameters for the connection.

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19. (Currently amended) The machine readable medium of claim 18 wherein the at least one QOS parameter further comprises end-to-end transit delay for the connection.

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20. (Currently amended) The machine readable medium of claim 18 wherein the at least one QoS parameter further comprises jitter.